

CLAIMS

What is claimed is:

1. In a network, a method of checking connectivity between
5 endpoints, said method comprising:
 sending a message from an originating endpoint to a first terminating
 endpoint, said message directing said first terminating endpoint to enable
 detection of continuity check cells used for checking connectivity between said
 originating endpoint and said first terminating endpoint, wherein said first
10 terminating endpoint is programmed to suppress generation of continuity check
 cells; and
 sending continuity check cells from said originating endpoint to said first
 terminating endpoint, wherein said originating endpoint is programmed to
 refrain from acting in response to an absence of continuity check cells from said
15 first terminating endpoint.
2. The method of Claim 1 wherein said first terminating endpoint is
programmed to suppress generation of continuity check cells in response to
said message.
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3. The method of Claim 1 wherein said message is a setup message
used for setting up communication between said originating endpoint and said
first terminating endpoint.
- 25 4. The method of Claim 1 wherein said message is an add-party
message for setting up communication between said originating endpoint and a
second terminating endpoint over a communication path that has some

commonality with a communication path between said originating endpoint and said first terminating endpoint.

5 5. The method of Claim 1 wherein said originating endpoint
5 comprises a switch.

6. The method of Claim 1 wherein said first terminating endpoint is
one of multiple terminating endpoints receiving broadcast messages from said
originating endpoint in a point-to-multipoint connection.

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7. The method of Claim 1 wherein said network is an asynchronous
transfer mode network.

8. In a network, a method of checking connectivity between
15 endpoints, said method comprising:
 receiving at a first terminating endpoint a message sent from an
originating endpoint, said message directing said first terminating endpoint to
enable detection of continuity check cells used for checking connectivity
between said originating endpoint and said first terminating endpoint, wherein
20 said first terminating endpoint is programmed to suppress generation of
continuity check cells; and

 providing notification to a network manager when continuity check cells
from said originating endpoint are not detected.

25 9. The method of Claim 8 wherein said originating endpoint is
programmed to refrain from acting in response to an absence of continuity
check cells from said first terminating endpoint.

10. The method of Claim 8 wherein said first terminating endpoint is programmed to suppress generation of continuity check cells in response to said message.

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11. The method of Claim 8 wherein said message is a setup message used for setting up communication between said originating endpoint and said first terminating endpoint.

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12. The method of Claim 8 wherein said message is an add-party message for setting up communication between said originating endpoint and a second terminating endpoint over a communication path that has some commonality with a communication path between said originating endpoint and said first terminating endpoint.

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13. The method of Claim 8 wherein said first terminating endpoint is one of multiple terminating endpoints receiving broadcast messages from said originating endpoint in a point-to-multipoint connection.

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14. A computer-usable medium having computer-readable program code embodied therein for causing a computer system to perform a method of checking connectivity between endpoints in a network, said method comprising:

sending a message from an originating endpoint to a first terminating endpoint, said message directing said first terminating endpoint to enable

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detection of continuity check cells used for checking connectivity between said originating endpoint and said first terminating endpoint, wherein said first

terminating endpoint is programmed to suppress generation of continuity check cells; and

5 sending continuity check cells from said originating endpoint to said first terminating endpoint, wherein said originating endpoint is programmed to refrain from acting in response to an absence of continuity check cells from said first terminating endpoint.

10 15. The computer-usable medium of Claim 14 wherein said first terminating endpoint is programmed to suppress generation of continuity check cells in response to said message.

16. The computer-usable medium of Claim 14 wherein said computer system comprises a switch.

15 17. The computer-usable medium of Claim 14 wherein said first terminating endpoint is one of multiple terminating endpoints receiving broadcast messages from said originating endpoint in a point-to-multipoint connection.

20 18. A computer-usable medium having computer-readable program code embodied therein for causing a computer system to perform a method of checking connectivity between endpoints in a network, said method comprising:
25 receiving at a first terminating endpoint a message sent from an originating endpoint, said message directing said first terminating endpoint to enable detection of continuity check cells used for checking connectivity between said originating endpoint and said first terminating endpoints, wherein

said first terminating endpoint is programmed to suppress generation of continuity check cells; and

providing notification to a network manager when continuity check cells from said originating endpoint are not detected.

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19. The computer-usable medium of Claim 18 wherein said originating endpoint is programmed to refrain from acting in response to an absence of continuity check cells from said first terminating endpoint.

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20. The computer-usable medium of Claim 18 wherein said first terminating endpoint is programmed to suppress generation of continuity check cells in response to said message.

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21. The computer-usable medium of Claim 18 wherein said first terminating endpoint is one of multiple terminating endpoints receiving broadcast messages from said originating endpoint in a point-to-multipoint connection.

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22. The computer-usable medium of Claim 18 wherein said computer system comprises a switch.

23. A system for checking connectivity between endpoints in a network, said system comprising:

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means for sending a message from an originating endpoint to a first terminating endpoint, said message directing said first terminating endpoint to enable detection of continuity check cells used for checking connectivity between said originating endpoint and said first terminating endpoint, wherein

said first terminating endpoint is programmed to suppress generation of continuity check cells; and

means for sending continuity check cells from said originating endpoint to said first terminating endpoint, wherein said originating endpoint is

5 programmed to refrain from acting in response to an absence of continuity check cells from said first terminating endpoint.

24. The system of Claim 23 wherein said first terminating endpoint is programmed to suppress generation of continuity check cells in response to
10 said message.

25. A system for checking connectivity between endpoints in a network, said system comprising:

means for receiving at a first terminating endpoint a message sent from
15 an originating endpoint, said message directing said first terminating endpoint to enable detection of continuity check cells used for checking connectivity between said originating endpoint and said first terminating endpoints, wherein said first terminating endpoint is programmed to suppress generation of continuity check cells; and

20 means for providing notification to a network manager when continuity check cells from said originating endpoint are not detected.

26. The system of Claim 25 wherein said originating endpoint is programmed to refrain from acting in response to an absence of continuity
25 check cells from said first terminating endpoint.

27. The system of Claim 25 wherein said first terminating endpoint is programmed to suppress generation of continuity check cells in response to said message.

5 28. The system of Claim 25 further comprising:
means for notifying a network manager when continuity check cells from said originating endpoint are not detected at said first originating endpoint.

29. A device comprising:
10 a memory unit; and
a controller coupled to said memory unit, said controller for executing a method of checking connectivity between endpoints in a network, said method comprising:
sending a message to a first terminating endpoint, said message
15 directing said first terminating endpoint to enable detection of continuity check cells used for checking connectivity between said device and said first terminating endpoint, wherein said first terminating endpoint is programmed to suppress generation of continuity check cells;
sending continuity check cells to said first terminating endpoint; and
20 refraining from acting in response to an absence of continuity check cells from said first terminating endpoint.

30. The device of Claim 29 wherein said first terminating endpoint is programmed to suppress generation of continuity check cells in response to
25 said message.

31. The device of Claim 29 wherein said device comprises a switch.

32. The device of Claim 29 wherein said message is a broadcast message sent to multiple terminating endpoints including said first terminating endpoint.

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33. A device comprising:

a memory unit; and

a controller coupled to said memory unit, said controller for executing a method of checking connectivity between endpoints in a network, said method comprising:

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receiving a message sent from an originating endpoint, said message directing said device to enable detection of continuity check cells used for checking connectivity between said originating endpoint and said device;

suppressing generation of continuity check cells; and

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providing notification to a network manager when continuity check cells from said originating endpoint are not detected.

34. The device of Claim 33 wherein said originating endpoint is programmed to refrain from acting in response to an absence of continuity check cells from said device.

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35. The device of Claim 33 wherein said device is programmed to suppress generation of continuity check cells in response to said message.

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36. The device of Claim 33 wherein said device is one of multiple devices receiving broadcast messages from said originating endpoint in a point-to-multipoint connection.